

IN THE CLAIMS

Please amend claims as follows:

1. (Previously Presented) A process for producing a rotor blade for a wind power system, wherein at least two rotor blade elements are arranged one behind the other in a longitudinal direction of the rotor blade and are glued together via at least one connecting elements bridging a partition line between the rotor blade elements, wherein at least one connecting element is aligned with said rotor blade elements, wherein a hollow space is formed between an outer delimitation surface of at least one of the rotor blade elements and at least one fixing segment of the inner delimitation surface of said connecting element, and subsequently the hollow space is flooded with an adhesive.

2. (Previously Presented) The process according to claim 1, wherein the alignment of the connecting element is locked before flooding the hollow space by gluing a locking rim of the inner delimitation surface of the connecting element, at least partially surrounding the fixing segment, to an outer delimitation surface of at least one of the rotor blade elements.

3. (Previously Presented) The process according to claim 2, wherein said hollow space is sealed tightly at least in the region of the locking rim.

4. (Previously Presented) The process according to claim 2 or claim 3, wherein the connecting element is glued to at least one of the rotor blade elements in the region of the locking rim with a thickened epoxy resin and/or polyester resin.

5. (Previously Presented) The process according to claim 1, wherein, for flooding, a negative pressure is generated in the hollow space or the adhesive is pumped into the hollow space with overpressure.

6. (Previously Presented) The process according to claim 1, wherein the adhesive has a dynamic viscosity η in the range of about 130-230 Mpas, and a kinematic viscosity η/ρ in the range of about $1.2 - 2 \times 10^5 \text{ m}^2/\text{s}$.

7. (Previously Presented) The process according to claim 1, wherein the adhesive is either a liquid epoxy resin or polyester resin.

8. (Previously Presented) The process according to claim 1, wherein after flooding, the adhesive hardens at room temperature or for a period of time of approximately 6 to 10 hours at a temperature of about 70°C.

9. (Previously Presented) The process according to claim 5, wherein the supply of adhesive is effected at the deepest location of the hollow space as seen from the outer delimitation surface of the rotor blade or the negative pressure is generated at the location which is located highest.

10. (Previously Presented) The process according to claim 1, wherein said rotor blade elements are produced in the same mold, in which, at the desired place of separation, a forming part, and, if necessary, for the formation of the hollow space, a separating film is

inserted.

11. (Previously Presented) The process according to claim 10, wherein at least one connecting element is produced in the same mold as the rotor blade elements.

12. (Previously Presented) A rotor blade for a rotor of a wind power system having at least two rotor blade elements arranged one behind the other in a longitudinal direction of the rotor blade and being glued together, comprising at least one connecting elements bridging a partition line between the rotor blade elements and having at least two adherend segments, wherein each of them is glued together with one of the rotor blade elements over a large surface.

13. (Previously Presented) The rotor blade according to claim 12, wherein said at least one connecting element is at least partially accommodated in a recess formed by the outer delimitation surfaces of the rotor blade elements in the region of the separation line.

14. (Previously Presented) The rotor blade according to claim 13, wherein said recess at least partially surrounds the longitudinal axis of the rotor blade.

15. (Previously Presented) The rotor blade according to claim 13 or claim 14, wherein the outer circumference of at least one rotor blade element tapers towards the separation line in a wedge-shaped manner in a cutting plane extending perpendicularly to the longitudinal axis for forming the recess.

16. (Previously Presented) The rotor blade according to claim 15, wherein said

connecting element has an inner delimitation surface extending in a complementary manner to the profile of the recess.

17. (Previously Presented) The rotor blade according to claim 16, wherein the connecting element has an outer surface which is flush with the adjacent regions of the outer surfaces of the rotor blade elements.

18. (Previously Presented) The rotor blade according to claim 17, wherein at least one connecting element has a construction corresponding to the construction of adjacent regions of the rotor blade elements.

19. (Previously Presented) The rotor blade according to claim 12, wherein at least one rotor blade element is constructed as a hollow body with a shell accommodating at least one bar absorbing bending forces.

20. (Previously Presented) A wind power system, comprising a rotor having at least one rotor blade and being pivoted about a rotor axis extending approximately horizontally, wherein the rotor blade comprises at least two rotor blade elements arranged one behind the other in a longitudinal direction of the rotor blade and being glued together, comprising at least one connecting elements bridging a partition line between the rotor blade elements and having at least two adherend segments, wherein each of them is glued together with one of the rotor blade elements over a large surface.

21. (Previously Presented) A rotor blade element for the rotor of a wind power

system; wherein the rotor blade element is connectable with at least one further rotor blade element to form a rotor blade, wherein the rotor blade element and the at least one further rotor blade element are arranged one behind the other in a longitudinal direction of the rotor blade, and the rotor blade element has a recess at the end connectable with the further rotor blade element which is part of a space filled with adhesive in the connected state.

22. (Previously Presented) The rotor blade element of claim 21, further comprising:
a shell; and
a diminution of the shell facing a separation line; wherein the diminution is designed to form a hollow space with a connecting element necessary for assembly of the rotor blade.

23. (Previously Presented) The rotor blade element according to claim 22, wherein the rotor blade element is a prefabricated longitudinal module.

24. (Previously Presented) The rotor blade element according to claim 23, wherein the shell of the rotor blade element is one piece.

25. (Previously Presented) The rotor blade element according to claim 24, wherein the rotor blade element is at least four meters long.

26. (Currently Amended) A connecting element for bridging a separation line
between~~connecting~~ rotor blade elements for a rotor blade of a wind power system, comprising:

at least two fixing segments, wherein the at least two fixing segments taper towards the surface of the connecting element in a wedge-shaped manner beginning from the separation line between the rotor blade elements; and

locking segments surrounding said fixing segments,

wherein the connecting element has diminutions directed outwardly in the direction of the longitudinal axis of the rotor blade elements to be connected, and

wherein the diminutions are formed in such a way that the connecting element forms a hollow space with the rotor blade elements to be connected.

27. (Previously Presented) The process according to claim 1, wherein the adhesive is resin.

28. (Previously Presented) The process according to claim 1, wherein the adhesive has a dynamic viscosity η in the range of about 150-210 Mpas, and a kinematic viscosity η/ρ in the range of about $1.4 - 1.8 \times 10^5 \text{ m}^2/\text{s}$.

29. (Previously Presented) The process according to claim 1, wherein the adhesive has a dynamic viscosity η in the range of about 170-190 Mpas, and a kinematic viscosity η/ρ in the range of about $1.6 - 1.8 \times 10^5 \text{ m}^2/\text{s}$.

30. (Previously Presented) The process according to claim 1, wherein the adhesive has a dynamic viscosity η of about 180.

'31. (Previously Presented) The rotor blade according to claim 18, wherein the construction of the at least one connecting elements is a laminate-shaped construction.